

# BIOL 4403 - Ornithology Spring 2025 Syllabus

## INSTRUCTOR AND COURSE DESCRIPTION

**Instructor:** Dr. Thornton R. Larson

**Office Hours:** MR 1 PM -2 PM; Tues 430 PM - 7 PM;  
or by appointment

**Office:** WSB 221

**Office Phone:** (432)837-8084

**Email:** Thornton.Larson@sulross.edu

**Lectures:** MW 6 PM-715PM WSB 107

**Laboratory:** M 330-520 PM

## Course Description

This course will require 16 weeks of work. It consists of several fantastic discussions on birds and their evolution, morphology, and behavior. The time commitment is expected to be around 6 hours per week outside of class for study and individual projects. Each unit is associated with readings from the textbook, a few online videos, and some exercises to rehearse the knowledge taken in. This course strongly follows the textbook and is ordered by current taxonomic understanding. By approaching the material in this way, each unit from week to week will contain many similarities, building on your learned knowledge.

Birds are one of the most popular animals that lay people have a fascination with. For Thousands of years, humans have been mesmerized by flight, plumage, and egg-laying. Texas has more bird species that make it a permanent home, or just migrate through than any other state. As such, some labs will incorporate field outings to gain an appreciation of the diversity of birds in the Trans Pecos region of Texas. This course aims to equip students with the knowledge of worldwide Orders and Families of birds, as well as the local species. Several field trips directly associated with the lab portion will be required for the course.

Lab will primarily consist of a general overview on major taxonomic groups of birds with a specific focus on those that can be found within the Big Bend region. We will also cover primary forms and functions unique to birds. Students will be expected to understand the unique features of birds as well as identification of birds at the Class, Order, Family, Genus, and species names for the majority of the material

## Required Materials

Gill, F.B., R.O. Prum, and S.K. Robinson. 2019. *Ornithology* (4th ed.)

## Optional Materials

**Field Guide to birds:** Dunn, J.L., and J. Alderfer. 2017. *National Geographic Field Guide to the Birds of North America* (7th ed.). **Good alternative field guide:** *The Sibley Field Guide to Birds of North America* (get the 2nd printing of 2nd ed.)

## **Exams and Grading**

4 lecture exams (each 12.5% of total grade) 50%

5 Lecture Assignments (each 2% of total grade) 10%

2 Lab Practicals (Each 10% of total grade) 20%

Lab Bird Song Quiz (5% of total grade) 5%

Lab Presentation (5% of total grade) 5%

Lab Bird Field Identification Journal (5% of total grade) 5%

Exit Notes (5% of total grade) 5%

A 90 – 100% B 80 – 89% C 70 – 79% D 60 – 69% F <60%

## **COURSE OBJECTIVES, LEARNING OUTCOMES, MARKETABLE SKILLS, POLICIES, AND UNIVERSITY SERVICES**

**Course Objectives:** At the end of the semester, students will:

1. Sight-recognize the Birds of the Trans Pecos and know the habitat and range for which they would be encountered.
2. Know the families of North American Avian Fauna.
3. Know the orders of Birds.
4. Be able to use morphological features to identify and classify living and preserved Birds.
5. Understand and compare different reproductive strategies of Birds.
6. Use a standard field guide to identify Birds.
7. Utilize databases to find primary literature to learn more about a Bird Family.
8. Keep journal records of field sightings and behaviors of Birds.

### **Student Learning Outcomes (SLOs) for Biology:**

1. Demonstrate an understanding of evolution by natural selection.
2. Demonstrate an integration of environmental awareness into everyday modern life.
3. Understanding how to incorporate molecular biology into the study of the whole organism.
4. Demonstrate utilization of various field techniques toward addressing scientific questions in the discipline.
5. Conduct basic laboratory experiments utilizing standard observational strategies.

## **Marketable Skills**

1. Ability to organize, analyze, and interpret data.
2. Proficiency in using presentation software.
3. Experience in managing time and meeting deadlines.
4. Ability to speak effectively and write concisely about scientific topics.
5. Experience in the development of professional email correspondence.

## **Attendance:**

Mandatory. No roll will be called, but this course is sized to where I will recognize when someone is not present. I am allowed to drop you from my class if you miss more than six times (that accounts for 2 full weeks of lecture). I do not wish to hear excuses for missing class, and do not want to hear about it every time you are gone. Absences are excused only if you have a documented, university approved excuse (hospitalization, funeral, etc.) **DO NOT MISS EXAMS** unless you have a documented, university-approved excuse. If you do not inform me of your approved absence before the exam it will be a ZERO. For labs, **DO NOT MISS LAB PRACTICALS!!!** It is impossible to re-run them as they are setup with many lab components that take up space that is not guaranteed.

## **Time Commitment Expectations:**

**Note** – This outline is subject to change depending on individualized learning needs. The exams will be administered on the dates given unless material relevant for a given exam has not been covered.

**STUDYING:** As a general rule, students should spend 2-3 hours studying for every 1 hour of lecture material. So, for this class, you need to allocate 5-7.5 hours per week to study the lecture material. Completing the readings is technically required before lecture so, **I HIGHLY RECOMMEND READING BEFORE LECTURE.** You have been given the tentative schedule- please review it and read the material beforehand. I recommend reading your notes in conjunction with reading the relevant textbook chapters. Studying is best done shortly after the lecture, not all at once the night before the exam. Look up anything that you do not understand or visit with your instructor during office hours. Times can be higher for people who need to put in more time for their reading and learning.

## **Summary Papers:**

More specific instructions on summary papers will be provided on Blackboard. The purpose of these assignments is for you to read current research in Ornithology. When I announce the assignments, you will have one week to submit the paper you plan to review to me, upon which I will state if A) it is a research paper (many students still at this stage in their education are unfamiliar with what constitutes a peer-reviewed research paper), B) if the paper is something that I think you are able to understand in a thorough enough manner to review it. If you choose

not to check the paper with me and it is not a peer-reviewed research paper, you will lose significant points on the assignment.

A special late policy will be in place for summary papers. The policy is as follows: if it is late 1 minute to 24 hours 10% will be taken off the assignment; from 24 to 48 hours 20% taken off; and from 48 to 72 hours 30% taken off. Anything after 72 hours (3 days) will be a zero. That is a daily grade level for papers that would receive 20/20 points.

### **Exit Notes:**

Upon the conclusion of every class, students will fill out notecards about the following topics. One will express something they are lost on and should consider scheduling office hours to discuss for their understanding. The second is for things they mostly got. This will inform the instructor to consider reviewing that topic, likely at the beginning of the next class. The third is for topics that they completely understand. All of these allow the instructor to understand what areas may need more attention in next lectures, reviews before exams, and even future courses.

### **Late Work Policy:**

Late work is frowned upon for assignments to be turned in. All assignments will be due turned in to the appropriate assignment section (Blackboard or other online program) before class starts that day. That means if class starts at 11:00 AM the assignment is in Blackboard by 10:59.59 AM. After this time, you will lose 10% on the assignment. After 24–48 hours late it will be 20% off, and 48–72 hours late it will be 30% off. Beyond these times it will be a '0' on the assignment. These terms are meant to respect both timeliness and flexibility of deadlines and will be upheld.

### **SRSU Library Services**

The Sul Ross Library offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, [library.sulross.edu](http://library.sulross.edu). Off-campus access requires your LoboID and password. Check out materials using your photo ID. Librarians are a tremendous resource for your coursework and can be reached in person, by email ([srsulibrary@sulross.edu](mailto:srsulibrary@sulross.edu)), or phone (432-837-8123).

### **SRSU Disability Services:**

ADA (Americans with Disabilities Act) Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Rebecca Greathouse Wren, LPC-S, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email [rebecca.wren@sulross.edu](mailto:rebecca.wren@sulross.edu). Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas, 79832

## **ACADEMIC HONESTY:**

The University expects all students to engage in all academic pursuits in a manner that is beyond reproach and to maintain complete honesty and integrity in the academic experiences both in and out of their classroom. The University may initiate disciplinary proceeding against a student accused of any form of academic dishonesty, including but not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials. "Cheating" includes 1. Copying from another student's test paper, laboratory report, other report, or computer files, data, listings, and/or programs, or allowing another student to copy from same. 2. Using, during a test, materials not authorized by the person giving the test. 3. Collaborating, without authorization, using, buying, selling, stealing, transporting, soliciting, copying, or possessing, in whole or in part, the contents of a non-administered test. 5. Substituting for another student; permitting any other person, or otherwise assisting any other person to substitute for oneself or for another student in the taking of an examination or test or the preparation of academic work to be submitted for academic credit. 6. Bribing another person to obtain a non-administered test or information about a non-administered test. 7. Purchasing, or otherwise acquiring and submitting as one's own work any research paper or other writing assignment prepared by an individual or firm. This section does not apply to the typing of a rough and/or final version of an assignment by a professional typist. 8. "Plagiarism" means the appropriation and the unacknowledged incorporation of another's work or idea in one's own written work offered for credit. 9. "Collusion" means the unauthorized collaboration with another person in preparing written work offered for credit. 10. "Abuse of resource materials" means the mutilation, destruction, concealment, theft or alteration of materials provided to assist students in the mastery of course materials. 11. "Academic work" means the preparation of an essay dissertation, thesis, report, problem, assignment, or other project that the student submits as a course requirement or for a grade. 12. "Falsification of Data" means the representation, claim, or use of research, data, statistics, records, files, results, or information that is falsified, fabricated, fraudulently altered, or otherwise misappropriated or misrepresented. All academic dishonesty cases may be first considered and reviewed by the faculty member. If the faculty member believes that an academic penalty is necessary, he/she may assign a penalty but must notify the student of his/her right to appeal to the department chair, the dean and eventually, to the Provost and Vice President for Academic and Student Affairs before imposition of the penalty. At each step in the process, the student shall be entitled to written notice of the offence and/or of the administrative decision, an opportunity to respond, and an impartial disposition as to the merits of his/her case. The decision of the Provost and Vice President for Academic and Student Affairs shall be final.

**I will reiterate here, I take academic dishonesty and plagiarism very seriously. Citations are your friend. I do not hesitate to report to the Dean of Students.**

## **Classroom Climate of Respect**

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe,

oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

**Supportive Statement**

I aim to create a learning environment for my students that supports various perspectives and experiences. I understand that the recent pandemic, economic disparity, and health concerns, or even unexpected life events may impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create a supportive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.

**For Remote/Online Courses Only - SRSU Distance Education Statement.**

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

**TENTATIVE LECTURE SCHEDULE**

	<b>DATE</b>	<b>TOPIC</b>	<b>Chapter</b>
<i>Week 1 Jan 13</i>			
	1/15	Syllabus, Introduction to Ornithology	Short History
<i>Week 2 Jan 20</i>			
	1/20	Avian Characteristics	Ch 1
	1/22	Nonpasserines 1	Table 1-1, Ch 3
<i>Week 3 Jan 27</i>			
	1/27	Nonpasserines 1	Table 1-1, Ch 3
	1/29	Passerines 1	Table 1-1, Ch 3
<i>Week 4 Feb 3</i>			

	2/3	Passerines 2	Table 1-1, Ch 3
	2/5	Evolutionary origin of birds	Ch 2
<b>Week 5 Feb 10</b>			
	2/10	Avian phylogeny <b>Summary Assignment 1 Due</b>	Ch 2.3 and 3
	<b>2/12</b>	<b>EXAM 1</b>	
<b>Week 6 Feb 17</b>			
	2/17	Feathers	Ch 4
	2/19	Flight	Ch 5
<b>Week 7 Feb 24</b>			
	2/24	Physiology	Ch 6
	2/26	Senses, Brains, and Intelligence	Ch 7
<b>Week 8 Mar 3</b>			
	3/3	Vocalizations <b>Summary Assignment 2 Due</b>	Ch 8
	<b>3/5</b>	<b>EXAM 2</b>	
<b>Week 9 Mar 10</b>			
	3/10	Annual Cycles, Migration, and Navigation	Ch 9 and 10
	3/12	Social Behavior	Ch 11
<b>Week 10 Mar 17</b>			
	3/17	<b>Spring Break</b>	
	3/19		
<b>Week 11 Mar 24</b>			
	3/24	Bird Sex	Ch 12
	3/26	Sexual Selection <b>Summary Assignment 3 Due</b>	Ch 13
<b>Week 12 Mar 31</b>			
	3/31	Breeding Systems	Ch 14
	<b>4/2</b>	<b>Exam 3</b>	
<b>Week 13 Apr 7</b>			
	4/7	Nests and Incubation	Ch 15
	4/9	Parents and Their Offspring <b>Summary Assignment 4 Due</b>	Ch 16
<b>Week 14 Apr 14</b>			
	4/14	Life Histories	Ch 17
	4/16	Populations	Ch 18
<b>Week 15 Apr 21</b>			
	4/21	Speciation	Ch 19
	4/23	Communities	Ch 20
<b>Week 16 Apr 28</b>			
	4/28	Conservation <b>Summary Assignment 5 Due</b>	Ch 21
	4/30	No Class Wed/Thurs for Mental Health Day	
<b>Final</b>	<b>5</b>	<b>Final Exam TBD</b>	

## LAB SCHEDULE

	DATE	TOPIC
<i>Week 2</i>	1/20	No Lab
<i>Week 3</i>	1/27	Introduction, Feathers, External anatomy
<i>Week 4</i>	2/3	Internal anatomy, Nests and Eggs
	<b>2/8</b>	<b>SATURDAY TRIP to Balmorhea</b>
<i>Week 5</i>	2/10	Field Trip: Kokernot Park
<i>Week 6</i>	2/17	Bird Taxonomy 1
<i>Week 7</i>	2/24	Bird Taxonomy 2
<b><i>Week 8</i></b>	<b>3/3</b>	<b>Lab Practical 1</b>
<i>Week 9</i>	3/10	Bird Taxonomy 3
<i>Week 10</i>	3/17	<b>SPRING BREAK</b>
<i>Week 11</i>	3/24	
<i>Week 12</i>	3/31	Field Trip: Alpine Cemetery
	<b>4/5</b>	<b>Saturday Field Trip Elephant Mtn: Dove Trapping</b>
<i>Week 13</i>	4/7	Field Trip: Kokernot Trip 2
<b><i>Week 14</i></b>	<b>4/14</b>	<b>LAB PRACTICAL 2</b>
<i>Week 15</i>	4/21	Bird songs
<b><i>Week 16</i></b>	<b>4/28</b>	<b>Bird Song Quiz and Lab Bird Family Presentations</b>
		<b>Lab Field Journal Due</b>